

CLAIMS

1. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant to protect the body of the occupant from the shoulder to the lumbar, the airbag having substantially the same vertical dimension as that of a seat back, wherein the airbag has a first region that is thinner than other regions in a vehicle width direction in the inflated state, the first region being disposed substantially at the center of the airbag in the vertical direction and extending substantially parallel to the seat back.

2. The occupant protection device according to Claim 1, wherein the airbag also has a second region that is thin in the vehicle width direction in the inflated state, the second region being disposed in front of and above the first region at a position corresponding to the upper arm of the occupant.

3. The occupant protection device according to Claim 1, wherein the first region that is thin in the vehicle width direction in the inflated state is substantially oval in side view.

4. The occupant protection device according to one of Claims 1 to 3, wherein the first region that is thin in the vehicle width direction in the inflated state is divided into sections in the vertical direction, and wherein a gas passage is provided between the sections.

5. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant to protect the body of the occupant from the shoulder to the lumbar and gas-pressure controlling means for setting an inner pressure of at least one of an upper portion and a lower portion of the airbag higher than an inner pressure of the remaining

portion.

6. The occupant protection device according to Claim 5, wherein the upper portion or the lower portion of the airbag is thicker than the remaining portion in the vehicle width direction in the inflated state.

7. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant to protect the body of the occupant from the shoulder to the lumbar and inflation controlling means for inflating at least one of an upper portion and a lower portion of the airbag before the remaining portion.

8. The occupant protection device according to Claim 7, wherein the remaining portion extends substantially parallel to a seat back.

9. The occupant protection device according to one of Claims 7 and 8, wherein the inflation controlling means is gas-flow regulating means for causing the gas to flow into the upper portion or the lower portion of the airbag before flowing into the remaining portion, the gas-flow regulating means being formed in the airbag by sewing.

10. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant to protect the body of the occupant from the shoulder to the lumbar, wherein the airbag includes shape adjusting means for adjusting the shape of the airbag so that the side of the airbag facing the occupant extends along the side of the occupant in the inflated state.

11. The occupant protection device according to Claim 10, wherein the shape adjusting means is one or more straps that extend in the vehicle width direction in the airbag.

12. The occupant protection device according to one of Claims 1 to 11,

wherein the airbag includes an inflatable body at the bottom of the airbag, the inflatable body being inflated at the side of the thigh of the occupant.

13. The occupant protection device according to one of Claims 1 to 12, wherein the airbag is folded such that an upper portion and a lower portion are placed on a center portion and is then rolled or accordion-folded in a front-to-rear direction of the vehicle.

14. An occupant protection device comprising an airbag attached to a seat of a vehicle, the airbag being inflated with gas from an inflator to protect the body of an occupant, wherein the airbag moves the chest of the occupant away from a projecting portion of the vehicle when the vehicle collides on one side.

15. The occupant protection device according to Claim 14, wherein the airbag moves the chest of the occupant diagonally to the front away from a door of the vehicle.

16. The occupant protection device according to Claim 15, wherein the airbag includes a first inflatable body that inflates between a seat back and the back of the occupant along the edge adjacent to the door and a second inflatable body that inflates between the door and the side of the occupant adjacent to the door.

17. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant which faces a door to protect the body of the occupant from the shoulder to the lumbar, wherein the airbag includes an inflatable body having an external shape such that the inflatable body extends along the inner side of the door and the side of the occupant facing the door to fill a space between the inner side of the door and the side of the occupant facing the door in the inflated state.

18. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant which faces a door to protect the body of the occupant from the shoulder to the lumbar, wherein the airbag includes a recess for receiving a projecting portion that projects in the vehicle width direction from one of the inner side of the door and the side of the occupant facing the door in the inflated state.

19. The occupant protection device according to Claim 18, wherein the projecting portion is the upper arm of the occupant and the recess of the airbag receives the upper arm of the occupant in the inflated state.

20. The occupant protection device according to Claim 18, wherein the projecting portion is an armrest provided on the inner side of the door and the recess of the airbag receives the armrest on the inner side of the door in the inflated state.

21. An occupant protection device comprising an airbag that is inflated with gas from an inflator at a side of an occupant which faces a door to protect the body of the occupant from the shoulder to the lumbar, wherein the airbag includes an upper inflatable body and a lower inflatable body disposed so as to face each other from above and below across an armrest provided on the inner side of the door.

22. The occupant protection device according to Claim 21, wherein the upper inflatable body of the airbag has a region which is thinner than other regions in the vehicle width direction in the inflated state at a position corresponding to the upper arm of the occupant.

23. The occupant protection device according to Claim 21, wherein the upper inflatable body of the airbag is thicker than the lower inflatable body in the vehicle width direction in the inflated state.

24. The occupant protection device according to Claim 21, wherein the lower inflatable body of the airbag is inflated before the upper inflatable body.

25. The occupant protection device according to one of Claims 21 to 24, wherein each of the lower inflatable body and the upper inflatable body of the airbag has a dedicated inflator.